

Application Number 10/789309
Response to Office Action dated 10/01/2007

REMARKS

Applicant respectfully request favorable reconsideration and reexamination of this application.

Claim 1 has been revised for clarification. The revision is supported by for example, Fig. 5A and page 13, lines 33-34 in the Specification.

There is no new matter.

Claim Rejection - 35 U.S.C. § 102

Claims 1, 4-5, and 7 were rejected under 35 USC 102(e) as being anticipated by Tanaka et al. (US 5513164). Applicant respectfully traverses this rejection.

The rejection erroneously states that reference number 52 of Tanaka et al. discloses a converging lens. Claim 1 has been revised to clarify the feature.

Tanaka et al. discloses that lens 52 is a collimator where low density beam is formed into parallel light bundles (see column 16, line 4). A light beam that is parallel does not converge. Further, Figs. 24, 34, and 36-37 of Tanaka et al. illustrate that the diameter of the beam incident on collimator lens 52 is the same as the diameter of the beam exiting the collimator lens 52 and the diameter of the beam stays the same until the beam is incident on the objective lens 55. Accordingly, collimator lens 52 does not convert the incident light beam to converge to have a smaller diameter than the incident light beam. Further, the beam leaving the collimator lens 52 also does not diverge prior to becoming incident on the objective lens 55.

In contrast, claim 1 requires a relay lens disposed between the infrared laser light source and the objective lens, wherein the infrared light beam emitted from the infrared laser light source is converted by the relay lens so that the infrared light beam exiting the relay lens converges to have a smaller diameter than the infrared light beam incident on the relay lens and then, as the infrared light beam diverges once again, the infrared light beam is incident on the objective lens. Tanaka et al. fails to teach at least this feature of claim 1.

Further, one of ordinary skill in the art would understand that a collimator lens is not a converging lens. A collimator lens converts a diverging incident beam to a parallel excident beam. A converging lens converts a diverging incident beam to a converging excident beam. One of ordinary skill in the art would also understand converging to mean a light beam is

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brought together to a focal point. Accordingly, it is not a reasonable interpretation of the phrase "converging" to include converting a diverging beam to a parallel beam.

For at least this reason, Tanaka et al. does not disclose all of the features of claim 1. Tanaka et al. does not anticipate claim 1. Claim 1 is allowable over Tanaka et al. Claims 4-5 and 7 are also allowable over Tanaka et al. for at least the same reason as claim 1 from which they depend. Applicants respectfully request a favorable reexamination and reconsideration of the claims.

Claim Rejection - 35 U.S.C. § 103

Claim 28 was rejected under 35 USC 102(b) as being unpatentable over Tanaka et al. in view of Jeong (US 6992967), in view of Tanaka et al., in view of Umeda et al. (US 4862196). This is an improper rejection because the rejection combines multiple references for a 102(b) rejection. The rejection also refers to Tanaka et al. twice. It is believed that claim 28 was rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong, in view of Umeda et al. and the rejection is addressed accordingly. If this belief is incorrect, Applicant respectfully requests the Examiner to correct Applicant's understanding of the disposition of the claim so that the Applicant may fully address the rejection.

Tanaka et al. does not teach all of the features of claim 28, as indicated by the citing of further references in the rejection. Further, neither Jeong nor Umeda et al. teach a relay lens disposed between the infrared laser light source and the objective lens, wherein the infrared light beam emitted from the infrared laser light source is converted by the relay lens so that the infrared light beam exiting the relay lens converges to have a smaller diameter than the infrared light beam incident on the relay lens and then, as the infrared light beam diverges once again, the infrared light beam is incident on the objective lens. Thus, Jeong in view of Umeda et al. fail to remedy the deficiencies of Tanaka et al. Therefore, claim 28 is not obvious in view of Tanaka et al. in view of Jeong, in view of Umeda et al.

Claims 2, 3, 6, 8-10, and 12-29 were rejected under 35 USC 103(a) using Tanaka et al. as the primary reference. Applicants respectfully traverse the rejections. As stated above in regard to claim 1, Tanaka et al. does not teach all of the features of claim 1.

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Claim 2 was rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Hagimori (US 6515805). Hagimori does not remedy the deficiencies of Tanaka et al.

Claims 3, 16, and 18-22 were rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Ashinuma et al. (US 5289451). Ashinuma et al. does not remedy the deficiencies of Tanaka et al.

Claim 6 was rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Umeda et al. Umeda et al. does not remedy the deficiencies of Tanaka et al.

Claims 8-10, 12, 23, 26, 27, and 29 were rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong. Jeong does not remedy the deficiencies of Tanaka et al..

Claim 13 was rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong, further in view of Hendriks et al. (US 2003/0151996). Jeong in view of Hendriks et al. do not remedy the deficiencies of Tanaka et al.

Claims 14 and 15 were rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong, further in view of Komma et al. (5111448). Jeong in further view of Komma et al. do not remedy the deficiencies of Tanaka et al.

Claim 17 was rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong, in view of Tanaka et al., in view of Ashinuma et al. The rejection refers to Tanaka et al. twice. Accordingly, it is believed that claim 17 was rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong, in view of Ashinuma et al. Jeong in view of Ashinuma et al. do not remedy the deficiencies of Tanaka et al.

Claim 24 was rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong, in view of Hagimori. Jeong in view of Hagimori do not remedy the deficiencies of Tanaka et al.

Claims 25 and 30-35 were rejected under 35 USC 103(a) as being unpatentable over Tanaka et al. in view of Jeong, in view of Ashinuma et al. Jeong in view of Ashinuma et al. do not remedy the deficiencies of Tanaka et al.

Accordingly, claims 2, 3, 6, 8-10, and 12-29 are allowable over the cited references for at least the same reason as claim 1. Applicants respectfully request a favorable reexamination and reconsideration of the claims.

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Allowable Subject Matter

Claim 11 was allowed.

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



Dated: December 28, 2007

Respectfully submitted,

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